

CLAIMS

What is claimed is:

- 1                   1.     An appliance application loading system for a network  
2     environment, comprising:  
3                   a client;  
4                   a web application server communicating with the client within the  
5     network environment;  
6                   an appliance communicably attached with the web server within the  
7     network environment; and  
8                   a loading mechanism provided on the network-based appliance and  
9     operative to download an application to the appliance from the web application  
10    server upon the occurrence of a power on/off cycle.
- 1                   2.     The appliance application loading system of claim 1 wherein  
2     the loading mechanism is provided at least in part by the client.
- 1                   3.     The appliance application loading system of claim 1 wherein  
2     the network-based appliance comprises an embedded device.
- 1                   4.     The appliance application loading system of claim 3  
2     wherein the embedded device comprises a non-volatile storage device.
- 1                   5.     The appliance application loading system of claim 1 wherein an  
2     application header and a universal resource locator (URL) are stored on the non-  
3     volatile storage device, and an application body is provided on the web server at  
4     a location corresponding with the URL.
- 1                   6.     The appliance application loading system of claim 5 wherein  
2     the application body comprises a servlet provided on the web server.

1           7.     The appliance application loading system of claim 1 wherein  
2     the network-based appliance comprises an embedded device, and the loading  
3     mechanism comprises a virtual machine.

1           8.     The appliance application loading system of claim 1  
2     wherein the network-based appliance uses the loading device to download  
3     specific appliance configuration settings.

1           9.     The appliance application loading system of claim 8  
2     wherein the appliance comprises an embedded device, and the loading  
3     mechanism comprises a program routine that copies an application program into  
4     memory of the embedded device from the web server for execution.

1           10.    A computer peripheral program product, comprising:  
2           a web application server;  
3           a network environment;  
4           a computer peripheral; and  
5           an application loader to load an extendable architecture application to  
6     the computer peripheral so as to enable versioning, updating, and remote  
7     configuration of the computer peripheral via the web application server;  
8           wherein the application loader associates an application header of the  
9     computer peripheral and an application body of the web application server.

1           11.    The computer peripheral program product of claim 10 wherein  
2     the appliance comprises a virtual machine including a web client.

1           12.    The computer peripheral program product of claim 10 wherein  
2     the appliance comprises a printer, and updating comprises configuring the  
3     printer with a printer application comprising a printer configuration state.

1 13. The computer peripheral program product of claim 12 wherein  
2 the printer configuration state comprises user settings.

1 14. The computer peripheral program product of claim 12 wherein  
2 the printer configuration state comprises a servlet on the web application server  
3 that transfers applications and settings to the printer in response to a power  
4 cycle that automatically updates the applications and configuration settings for  
5 the printer.

1 15. The computer peripheral program product of claim 10 wherein  
2 the application comprises an application header including identification  
3 information for the application and a uniform resource locator (URL) to the  
4 application body on the web application server, and the application body  
5 comprises one or more individual applications that can be loaded on the  
6 appliance.

1 16. A method for updating applications to embedded devices,  
2 comprising:  
3 providing a network-based appliance communicably attached with a  
4 web application server, the appliance having a loading mechanism to download  
5 an application to the appliance from the server;  
6 querying the appliance with the web server to determine presence of  
7 an application; and  
8 updating the appliance with the application from the server upon the  
9 occurrence of a power on/off cycle.

1 17. The method of claim 16 wherein the appliance comprises an  
2 embedded device, and updating comprises configuring the embedded device  
3 with an application comprising an embedded device configuration state.

1           18. The method of claim 17 wherein the embedded device  
2 configuration state comprises user settings.

1           19. The method of claim 17 wherein the embedded device  
2 configuration state comprises a servlet on the web application server that is  
3 transferred to the embedded device in response to a power cycle that  
4 automatically updates the applications and configuration settings for the  
5 embedded device.

1           20. The method of claim 16 wherein a plurality of appliances are  
2 communicably attached with the web application server each with a dedicated  
3 one of the loading mechanism, wherein the web application server stores  
4 appliance applications and configuration settings to enable plural appliance  
5 configuration setup to version and update such applications.

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